
Manner: NATURAL

The Medical Examiner assumes jurisdiction over deaths that are classified as natural due to the sudden and unexpected nature of the death in an apparently healthy individual, when there is no physician who has knowledge or awareness of the decedent's condition, when there is no next of kin to make disposition, or when there are suspicious circumstances surrounding the death. In these situations, the Medical Examiner becomes responsible for certification of death. It should be stressed that the natural deaths the Medical Examiner investigates may not be representative of all natural deaths in the general population, due to the possibility that jurisdictional considerations introduce significant bias.

In 2006, the King County Medical Examiner assumed jurisdiction over 752 deaths attributed to natural causes, representing 37% (752/2,055) of the cases investigated. The King County Medical Examiner certified 81% (609/752) of these deaths; attending physicians who had knowledge of the decedent's medical condition certified 19% (143/752). It should be noted that when a death is initially reported, there may be no evidence of an attending physician; a thorough scene investigation often reveals that the deceased did, in fact, have a physician with knowledge of the decedent's medical condition. That physician would then be contacted to certify the death. The King County Medical Examiner performed autopsies in 74% (448/609) of the deaths certified as natural, which included autopsies performed in all 17 deaths from Sudden Infant Death Syndrome (SIDS).

The data presented in this section are derived from the 752 natural deaths in which the King County Medical Examiner assumed jurisdiction. Cardiovascular disease accounted for the greatest proportion of natural deaths. Most deaths in which an autopsy was not performed were certified as due to "probable arteriosclerotic cardiovascular disease."

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2006

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|-------------------------------|--|
| CARDIOVASCULAR | |
| 3 | Aortic Aneurysm |
| 11 | Aortic Dissection |
| 196 | Arteriosclerotic Cardiovascular Disease (ASCVD) |
| 4 | Bacterial Endocarditis |
| 3 | Cardiac Dysrhythmia |
| 20 | Cardiomyopathy |
| 1 | Congenital Heart Disease |
| 3 | Congestive Heart Failure |
| 59 | Hypertensive ASCVD / Hypertensive Heart Disease |
| 4 | Myocarditis |
| 11 | Probable Arteriosclerotic Cardiovascular Disease |
| 3 | Valvular Heart Disease |
| 1 | Other |
| 424 | TOTAL CARDIOVASCULAR |
| CENTRAL NERVOUS SYSTEM | |
| 10 | Epilepsy (idiopathic & other non-traumatic etiologies) |
| 2 | Infarct |
| 2 | Meningitis |
| 16 | Spontaneous Intracerebral Hemorrhage |
| 15 | Spontaneous Rupture of Aneurysm |
| 17 | Other |
| 62 | TOTAL CENTRAL NERVOUS SYSTEM |
| ENDOCRINE | |
| 5 | Diabetic Ketoacidosis |
| 21 | Diabetes Mellitus |
| 1 | Pancreatitis |
| 1 | Other |
| 28 | TOTAL ENDOCRINE |
| GASTROINTESTINAL | |
| 1 | Bacterial Peritonitis |
| 2 | Gastrointestinal Hemorrhage |
| 3 | Obstruction |
| 4 | Perforating Ulcer |
| 3 | Other |
| 13 | TOTAL GASTROINTESTINAL |

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2006 (continued)

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|------------------------|---|
| HEPATIC | |
| 3 | Cirrhosis |
| 1 | Fatty Liver |
| 1 | Hepatic Failure |
| 7 | Hepatitis |
| 0 | Other |
| 12 | TOTAL HEPATIC |
| MALIGNANCY | |
| 5 | Breast |
| 4 | Colon |
| 11 | Lung |
| 0 | Pancreas |
| 1 | Prostate |
| 2 | Rectum |
| 17 | Other |
| 40 | TOTAL MALIGNANCY |
| OTHER PROCESSES | |
| 37 | Chronic Ethanolism (Alcoholism) |
| 4 | Chronic Renal Disease |
| 5 | HIV / AIDS |
| 1 | Infection |
| 3 | Labor / Delivery / Prematurity |
| 17 | Necrotizing fasciitis |
| 7 | No Anatomic or Toxicologic Cause of Death |
| 12 | Sepsis |
| 8 | Other |
| 94 | TOTAL OTHER PROCESSES |
| RESPIRATORY | |
| 1 | Asthma |
| 19 | Chronic Obstructive Pulmonary Disease |
| 24 | Pneumonia |
| 13 | Pulmonary Thromboembolus |
| 5 | Other |
| 62 | TOTAL RESPIRATORY |

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2006 (continued)

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|------------------|--|
| | SUDDEN INFANT DEATH SYNDROME (SIDS) |
| 17 | SIDS |
| 328 | TOTAL Non-Cardiovascular Cause of Death |
| 424 | TOTAL Cardiovascular Cause of Death |
| 752 | Total NATURAL DEATHS under KCMEO Jurisdiction, 2006 |

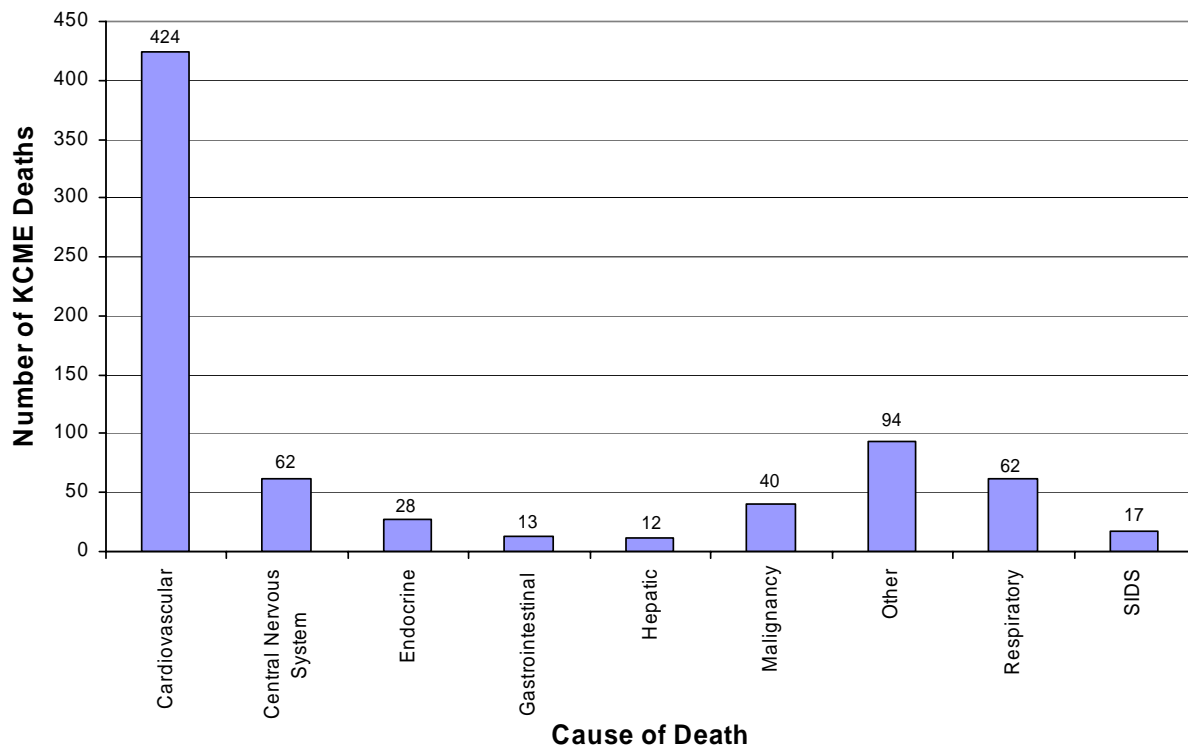
Graph 5-1 Deaths due to Natural Causes / King County Medical Examiner / 2006

Table 5-2 Natural Deaths / Race / Sex / King County Medical Examiner / 2006

| DISEASE PROCESS / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|--------------------------|------------|-----------|-----------|--------------------|-----------|--------------|------------|
| | WHITE | BLACK | ASIAN | NATIVE AMERICAN | OTHER | | |
| Cardiovascular | 354 | 34 | 22 | 4 | 10 | | 424 |
| <i>Male</i> | 250 | 27 | 15 | 3 | 7 | 302 | |
| <i>Female</i> | 104 | 7 | 7 | 1 | 3 | 122 | |
| Central Nervous | 46 | 9 | 3 | 2 | 2 | | 62 |
| <i>Male</i> | 26 | 8 | 1 | 1 | 1 | 37 | |
| <i>Female</i> | 20 | 1 | 2 | 1 | 1 | 25 | |
| Endocrine | 19 | 8 | 1 | 0 | 0 | | 28 |
| <i>Male</i> | 12 | 8 | 0 | 0 | 0 | 20 | |
| <i>Female</i> | 7 | 0 | 1 | 0 | 0 | 8 | |
| Gastrointestinal | 11 | 2 | 0 | 0 | 0 | | 13 |
| <i>Male</i> | 9 | 1 | 0 | 0 | 0 | 10 | |
| <i>Female</i> | 2 | 1 | 0 | 0 | 0 | 3 | |
| Hepatic | 9 | 2 | 1 | 0 | 0 | | 12 |
| <i>Male</i> | 7 | 1 | 0 | 0 | 0 | 8 | |
| <i>Female</i> | 2 | 1 | 1 | 0 | 0 | 4 | |
| Malignancy | 30 | 4 | 4 | 0 | 2 | | 40 |
| <i>Male</i> | 19 | 3 | 4 | 0 | 0 | 26 | |
| <i>Female</i> | 11 | 1 | 0 | 0 | 2 | 14 | |
| Other | 72 | 13 | 1 | 4 | 4 | | 94 |
| <i>Male</i> | 51 | 10 | 0 | 2 | 2 | 65 | |
| <i>Female</i> | 21 | 3 | 1 | 2 | 2 | 29 | |
| Respiratory | 50 | 8 | 3 | 1 | 0 | | 62 |
| <i>Male</i> | 35 | 5 | 2 | 1 | 0 | 43 | |
| <i>Female</i> | 15 | 3 | 1 | 0 | 0 | 19 | |
| SIDS | 11 | 3 | 2 | 0 | 0 | | 17 |
| <i>Male</i> | 7 | 2 | 1 | 0 | 0 | 10 | |
| <i>Female</i> | 4 | 1 | 1 | 1 | 0 | 7 | |
| Totals | 602 | 83 | 37 | 12 | 18 | | 752 |
| Percent | 80% | 11% | 5% | 1.6% | 2.4% | | 100% |

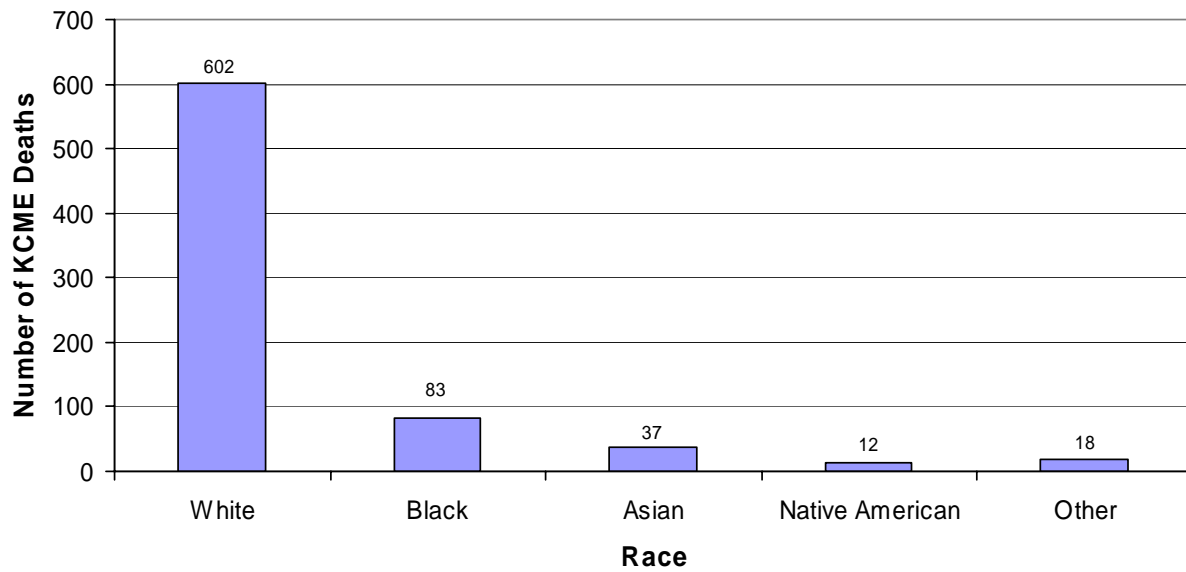
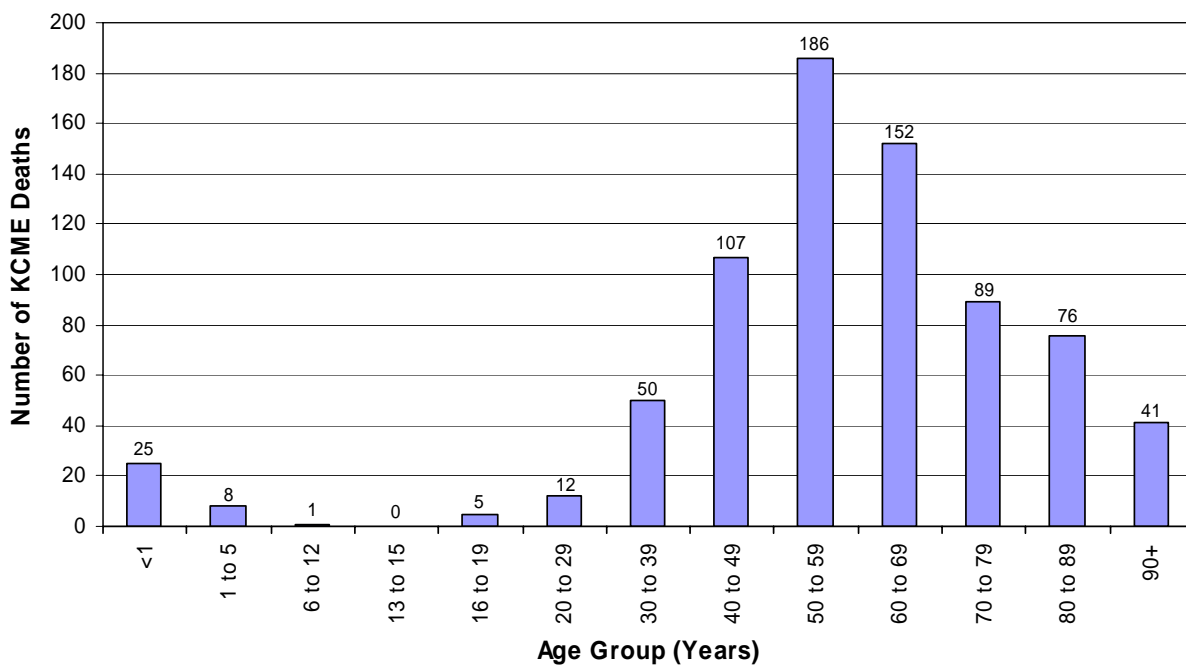
Graph 5-2 Natural Deaths / Race / King County Medical Examiner / 2006**Graph 5-3 Natural Deaths / Age Group / King County Medical Examiner / 2006**

Table 5-3 Natural Deaths / Age / Sex / King County Medical Examiner / 2006

| DISEASE PROCESS/ SEX | AGE GROUP (YEARS) | | | | | | | | | | | | | SUB TOTAL | TOTAL |
|----------------------------|-------------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|--------------|------------|
| | < 1 | 1 to 5 | 6 to 12 | 13 to 15 | 16 to 19 | 20 to 29 | 30 to 39 | 40 to 49 | 50 to 59 | 60 to 69 | 70 to 79 | 80 to 89 | 90 + | | |
| Cardiovascular | 0 | 0 | 0 | 0 | 1 | 3 | 26 | 51 | 95 | 99 | 67 | 52 | 29 | | 424 |
| Male | 0 | 0 | 0 | 0 | 0 | 2 | 23 | 42 | 80 | 83 | 35 | 29 | 8 | 302 | |
| Female | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 9 | 15 | 16 | 32 | 23 | 21 | 12 | |
| Central Nervous | 2 | 2 | 1 | 0 | 3 | 3 | 8 | 11 | 10 | 6 | 4 | 7 | 5 | | 62 |
| Male | 2 | 1 | 1 | 0 | 3 | 2 | 5 | 7 | 8 | 1 | 1 | 2 | 4 | 37 | |
| Female | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 4 | 2 | 5 | 3 | 5 | 1 | 25 | |
| Endocrine | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 9 | 4 | 4 | 1 | 0 | | 28 |
| Male | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 6 | 2 | 4 | 0 | 0 | 20 | |
| Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 2 | 0 | 1 | 0 | 8 | |
| Gastrointestinal | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 2 | 0 | 1 | 2 | | 13 |
| Male | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 2 | 0 | 0 | 0 | 10 | |
| Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | |
| Hepatic | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 2 | 1 | 0 | 0 | | 12 |
| Male | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 8 | |
| Female | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 4 | |
| Malignancy | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 7 | 17 | 7 | 3 | 1 | | 40 |
| Male | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 12 | 4 | 1 | 1 | 26 | |
| Female | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 5 | 3 | 2 | 0 | 14 | |
| Other | 6 | 3 | 0 | 0 | 0 | 1 | 6 | 27 | 33 | 14 | 0 | 1 | 3 | | 94 |
| Male | 6 | 1 | 0 | 0 | 0 | 1 | 1 | 22 | 21 | 10 | 0 | 1 | 2 | 65 | |
| Female | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 5 | 12 | 4 | 0 | 0 | 1 | 29 | |
| Respiratory | 0 | 2 | 0 | 0 | 0 | 4 | 5 | 6 | 19 | 8 | 6 | 11 | 1 | | 62 |
| Male | 0 | 1 | 0 | 0 | 0 | 4 | 2 | 4 | 14 | 6 | 4 | 7 | 1 | 43 | |
| Female | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 2 | 5 | 2 | 2 | 4 | 0 | 19 | |
| SIDS | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 17 |
| Male | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| Female | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| Totals | 25 | 8 | 1 | 0 | 5 | 12 | 50 | 107 | 186 | 152 | 89 | 76 | 41 | | 752 |
| Percent | 3.3 | 1.1 | 0.1 | 0 | 0.7 | 1.6 | 6.6 | 14.3 | 24.7 | 20.2 | 11.8 | 10.1 | 5.5 | | 100% |

Table 5-4 Natural Deaths / Sex / King County Medical Examiner / 2006

| CIRCUMSTANCES | SEX | | TOTAL |
|------------------|------------|------------|------------|
| | MALE | FEMALE | |
| Cardiovascular | 302 | 122 | 424 |
| Central Nervous | 37 | 25 | 62 |
| Endocrine | 20 | 8 | 28 |
| Gastrointestinal | 10 | 3 | 13 |
| Hepatic | 8 | 4 | 12 |
| Malignancy | 26 | 14 | 40 |
| Other | 65 | 29 | 94 |
| Respiratory | 43 | 19 | 62 |
| SIDS | 10 | 7 | 17 |
| Totals | 521 | 231 | 752 |
| Percent | 69% | 31% | 100% |

Table 5-5 Natural Deaths / Blood Alcohol / King County Medical Examiner / 2006

| METHOD | TESTED | | NOT | |
|------------------------|-----------|------------|------------|------------|
| | POSITIVE | NEGATIVE | TESTED | TOTAL |
| Cardiovascular | 52 | 232 | 140 | 424 |
| Central Nervous System | 1 | 34 | 27 | 62 |
| Endocrine | 2 | 11 | 15 | 28 |
| Gastrointestinal | 1 | 9 | 3 | 13 |
| Hepatic | 1 | 4 | 7 | 12 |
| Malignancy | 0 | 14 | 26 | 40 |
| Other Processes | 12 | 51 | 31 | 94 |
| Respiratory | 0 | 35 | 27 | 62 |
| SIDS | 0 | 17 | 0 | 17 |
| Totals | 69 | 407 | 276 | 752 |
| Percent | 9% | 54% | 37% | 100% |